# Information Exchange Workgroup Draft Transcript November 15, 2010

#### **Presentation**

#### <u>Judy Sparrow – Office of the National Coordinator – Executive Director</u>

Good morning, everybody and welcome to the HIT Policy Committee's Information Exchange Workgroup. This is a call which will extend from 10:00 to 11:30. Just a reminder to workgroup members to please identify yourselves when speaking. We will have an opportunity at the end of the call for the public to make comments.

Just a quick roll call, Micky Tripathi?

<u>Micky Tripathi – Massachusetts eHealth Collaborative – President & CEO</u> Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> David Lansky?

<u>David Lansky – Pacific Business Group on Health – President & CEO</u> Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> Judy Faulkner or Carl Dvorak?

<u>Judy Faulkner – Epic Systems – Founder</u> Here, Judy.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> Connie Delaney?

<u>Connie Delaney – University of Minnesota School of Nursing – Dean</u> Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> Gayle Harrell?

<u>Gayle Harrell – Florida – Former State Legislator</u> Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u>
Michael Klag? Latanya Sweeney? Charles Kennedy? Paul Egerman?

<u>Paul Egerman – Software Entrepreneur</u> Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> Jim Golden? <u>James Golden – Minnesota Dept. of Health – Director of Health Policy Division</u> Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u>
Dave Goetz? Jonah Frohlich? Steve Stack? George Hripcsak? Seth Foldy?

<u>Seth Foldy – Wisconsin – State Health Officer</u> Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> Jim Buehler? Walter Suarez?

<u>Walter Suarez – Institute HIPAA/HIT Education & Research – Pres. & CEO</u> Yes. I'm here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> George Oestreich?

<u>George Oestreich – Missouri Medicaid – Deputy Division Dir., Clinical Services</u> l'm here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> Tim Andrews? Jesse Blackwell?

#### Jesse Blackwell

Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> Sid Thornton?

<u>Sid Thornton – Intermountain Healthcare – Senior Medical Informaticist</u> Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u>
Art Davidson?

<u>Art Davidson – Public Health Informatics at Denver Public Health – Director</u> Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> Sorin Davis?

<u>Sorin Davis – CAQH – Managing Director, Universal Provider Data Source (UPD)</u> Here.

<u>Judy Sparrow – Office of the National Coordinator – Executive Director</u> Did I leave anybody off? Okay, I'll turn it over to Micky and David Lansky.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Thanks so much, everyone, for joining. I very much appreciate your joining this meeting of the Information Exchange Workgroup. What we want to do today is go over in detail the draft recommendations that the Provider Directory Taskforce has come up with for the upcoming HIT Policy Committee meeting on Friday, the 19<sup>th</sup>. The taskforce has been hard at work thinking about ... level provider directories and a set of recommendations related to those. As you'll see, there's still some work

to do with respect to specific policy recommendations that might flow from the areas of consensus that we've already reached, but that's something that we want to discuss on this call to get a sense from the workgroup about how far down the road we want to go on that.

What we want to do on this call is I'm going to ask, in a second, Walter Suarez, to talk about the— It's a little bit reverse from what you have on the agenda slide on slide two, but what we'll first do on the provider directory section is talk about the draft recommendations on ELPD, as we call it, entity level provider directories requirements and options, which will be the entire workgroup's opportunity to see the draft recommendations from the taskforce and hopefully to approve or amend and approve the recommendations that we will present on the 19<sup>th</sup>.

Then what we'd like to do is have an initial—and I stress "initial"—discussion of some further or more detailed policy recommendation areas that we may want to consider for entity level provider directories. That would be an area that we would take up after the upcoming HIT Policy Committee meeting, so the expectation is not that we try to reach consensus on any of those, but really just to start the conversation to get a course setting and calibration from the workgroup with respect to how far down the road we want to go on some of these areas, how granular we might want to get in some of these areas, what policy levers we want to consider in our scope of discussion, and then sort of initiate that conversation as well.

I think the other bit of house cleaning that we'd like to do first is to just for a second talk about public health and where we are on that and what our immediate plans are for that. There's not a whole lot to say on that right now, except that I think what we want to do is start to launch the Public Health Taskforce effort to proceed in parallel with the provider directories work that we've been doing. We had taken a tactical decision a little while ago based on those who had represented interests in the Provider Directory Taskforce and the Public Health Taskforce. Looking at the overlap in the membership of those two taskforces and the considerable amount of work that we're imposing on the Provider Directory Taskforce members, we've taken a decision that maybe we can't run those in parallel and really respect the volunteer nature of people's time that they're committing to this. But I think as we've gone through that work I think we probably have an opportunity here where we might be able to run those in parallel and the taskforce chairs, David Ross and Jim Buehler, I think are in a position where they'd be prepared to get that work started as well.

I think what we want to do is just have anyone e-mail either David or me or Judy Sparrow if you haven't already expressed interest in being on the Public Health Taskforce. Those who already have I think we already have your names so we can in parallel work the organization logistics on that.

#### <u>Judy Sparrow - Office of the National Coordinator - Executive Director</u>

Do you want me to state who I know is interested?

# <u>Micky Tripathi – Massachusetts eHealth Collaborative – President & CEO</u>

Sure, that would be terrific.

#### <u>Judy Sparrow – Office of the National Coordinator – Executive Director</u>

Jim Buehler, Seth Foldy, Jonah Frohlich, George Hripcsak, Deven McGraw, David Ross, Steve Stack, and Walter Suarez.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

So if you were named and are still interested, you don't need to do anything. If you're no longer interested please contact Judy. Also, if your name was not on the list and you're interested, please contact Judy.

I'm going to turn it over to Walter here in a second, but let me just ask the Information Exchange Workgroup co-chair, David Lansky, if he has any introductory remarks.

#### David Lansky - Pacific Business Group on Health - President & CEO

No, Micky. I just want to particularly thank you and Walter and Claudia, and Paul especially for doing a lot of work over weekends and so on to get us to this point. I think there's been a ton of great work done by this Provider Directory Committee and I really appreciate it. So I'll be looking forward to the conversation.

#### Micky Tripathi – Massachusetts eHealth Collaborative – President & CEO

If we can turn to slide three for a second, and then I'm going to hand it over to Walter. On slide three hopefully the workgroup members recall from our last call the overall framework that the taskforce has been operating under in the deliberations related to the provider directory, it's the Provider Directory Taskforce I'm talking about here. We laid out a set of steps that we're trying to structure our thought process and discussions and deliberations as much as we can to get us through a structured conversation a bit. We divided at a high level a set of activities and considerations under the title of "Recommendations on Directory Requirements and Options."

So you can think about, if you're assuming that there is an entity level directory concept, who might be users and what might the functions be, what would the content of such a directory be, what might be some operating requirements and business models that we need to think about there. Those are all in the way of recommendations, and as the slide conveys, that set of recommendations is what Walter is going to walk us through here in a second, with an eye toward having that be a set of recommendations to the Policy Committee. So we'd like the Information Exchange Workgroup here to reflect on those and then please offer any suggestions you have along the way. As I said, what we would aim toward by the end of this call is agreement on that set of recommendations or amendment and then agreement on amendment if that's necessary. Obviously if there's not agreement, there's not agreement. But that's what we would like to be able to get to by the end of today's call.

The other part, and that's that second part described, is in the area of policy recommendations and the initial discussion we want to have. Claudia Williams and I will be coming back and walking us through a set of slides that talks about that in a second.

Unless there are any further questions or comments from the workgroup, I'm going to turn it over to Walter Suarez, who has just done a terrific job as the co-chair of the Provider Directory Taskforce and has done a lot of work above and beyond the call of duty for any volunteer, which we really appreciate. Jonah Frohlich is the other co-chair. He's not able to make the call today.

Let me first just pause and see if there are any concerns, questions from any workgroup member before we dive in. Okay, I'll take silence as affirmation. Walter, can I turn it over to you?

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Thank you, Micky. Thanks for that introduction and setup for the recommendations. I do want to mention also Jonah's extensive work and commitment to the taskforce. I think it's been many, many hours by email and by phone and many other ways to come up with these recommendations and certainly all the members of the taskforce that have been so incredibly graceful with their time and expertise and input, so all of this is truly a reflection of that process.

If we go to the next slide, what you will see is a series of slides, and some of you have seen this coming up on each of those columns, if you will, of the framework on the right hand side that Micky mentioned. If we go to the next slide we're going to talk about the specific recommendations on each of those items, so the first one is regarding users. Throughout the discussions there was always a question and the need to clarify who are these entities that will be able to be part of and listed on and be involved in the entity level provider directory. So here's basically the recommendation. First, I'll highlight a few guidelines and then the recommendation itself of the type of entities that will be part of this entity level provider directory.

Really, what we're looking for is anyone, any entity that is involving the exchange of patient health information, whether it's a submitter, a receiver, a requester, a provider of that information, and the expectation is that those entities will be abiding by the Nationwide Health Information Network governance guidelines on standards, sort of an expected requirement for entities that participate in this. There's also clearly a need to coordinate the details of the entity listing, if you will, or the entity categorization with the Privacy and Security Tiger Team, since they're currently certainly discussing similar issues in the context of authentication and some of the other topics they're addressing. So there's clearly a need to make sure that our recommendations are coordinated with those that the Tiger Team is going to be providing. There's also the need to consider what to do with health care provider entities that do not have an EHR system and that might need to be listed perhaps, or identified and included in the provider directory, so that messages, even though they might not have an EHR system, messages can be still routed to those entities.

The recommended types of entities are basically organized in these four bullets, four groups. First, health care provider organizations, that's hospitals, clinics, nursing homes, long term care, pharmacies, labs, etc., and generally defined through definitions which we have actually provided at the back end of this presentation but generally are consistent with the terms and definitions used in federal regulations and laws like HIPAA, HITECH and regulations. Other health care organizations beyond health care provider organizations like health plans, public health agencies, etc., are also certainly involving this exchange. Then, health information organizations, HIOs, regional HIO operators, health information service providers that are involving the exchange of health information. Then, other organizations involving the exchange of health information, for example, business associates or clearinghouses that are engaged with hospitals, clinics, health plans, and others in the routing and exchange of health information. So those are the four types of entities. Let me pause there and see if there are any questions or comments on these particular slides.

Let's go to the next slide. This one also talks a little bit about the user, so who would not be part of the entity level provider directory would be individuals, like individual providers, physicians, and clinicians, which will be the focus of the individual level provider directory, and then patients, the patients themselves are certainly not intended to be involved or listed or identified in this entity level provider directory. Then also any other entities not involved in the exchange of patient health information exchange. There are of course numerous other entities that are out there in the industry that are not necessarily directly involved or even indirectly involved in the exchange of patient health information and that would not be needed or would not be part of the entity level provider directory.

Some important related policies and guidelines, certainly one of the questions is how to register entities and to that I think we're going to be covering that under the business model. Those questions about how does an entity become part of the entity level provider directory, how do entities get validated, those are questions certainly that are part of the business model. That also needs to be certainly coordinated with the work that particularly the Privacy and Security Tiger Team is doing with respect to things like authentication. So we'll talk about those a little bit down this presentation, down the road.

Any questions about this slide? Okay, well those were the users. Now let's talk about the functionality. The next slide will show some of the users and the functionality that this entity level provider directory will support. Throughout the various weeks and days that we have discussed this topic we came down basically to these four primary functional capabilities that will be supported by the entity level provider directory. First of all, it supports directed exchanges, both send and receive, as well as query retrieve. It also provides basic discoverability of entity and we have a draft definition, if you will, of what the term "discoverability" means later on. Then it provides basic discoverability of information exchange capabilities that the entity supports, what kind of formats, data content, data formats are supported by the entity that is going to be exchanging this information and would be listed in this entity level provider directory.

Then finally, provide some basic discoverability of the entity's security credentials, whichever the credentials might be, whether they're certificates or some other forms of security credentials. The assumptions here which are important to understand are functionality and functional capabilities supported by the entity level provider directory are basically that the message sender knows where the message needs to go in general so that they know the entity, the name of the entity perhaps, but they don't know exactly the complete address from a message exchange perspective.

The other assumption is that the messages will be able to be sent over the Internet using the standard Internet protocols and address schemas. The assumption is that the message security is going to be carried over of the agreed upon mechanism between the parties. For example, the use of PKI we're not specifically recommending that kind of use and certainly there will be much more to be said about this by the Security and Privacy Tiger Team, but we think it's important to ensure that people understand that the entity level provider directory will be able to support basic discoverability of that entity's security credentials and support the exchange of messages in a secure manner. But it's not the purview of the provider directory to really resolve or address specifically how that is going to be authenticated, validated, or performed.

Then the last assumption is that no assumptions are being made regarding some specific functionality of health information exchanges like a record locator service. Certainly the provider directory will be able to interact and work with such technology, but we wanted to make sure that there was no assumption being made that this requires some sort of record locator service type technology.

With respect to the users, we have worked out in great detail several different use cases on how the provider directory, the entity level provider directory will support specifically those use cases based on these functional capabilities. We have presented those several times in the past and we have included those in the presentation, in the background slides of the presentation, the back end. So we're not going to go through those use cases again we have gone through again several times through various calls of the taskforce and the workgroup. They've been refined in terms of some of the wording that we used and making sure that the wording was consistent with all these recommendations, but we haven't changed any of the key content of those use cases, so we're not going to go through those on this call.

Any questions about the uses and functionality being recommended to be supported by this provider directory? Okay, I think we can go to the next slide. The next slide talks about the content, and here the content relates to the what is it that will be collected and maintained in these entity level provider directories. So some general guidelines: First, the focus of the content that we recommend be included is primarily to make the entity level provider directory functionality executable and valuable. That's the primary goal of selecting and defining what content to include. We want to avoid including content that doesn't specifically and directly relate to the ability of the provider directory to execute its functionality and to provide value to the entities using the directory. We wanted to limit the content as much as possible to those elements.

So the basic content requirements we're recommending basically are they should be limited to data that does not need to be frequently updated. We think that that would create a lot of unnecessary demands on the directory itself and on the entities that are listed and included in the directory in terms of them maintaining the data in the directory. So we thought it would be probably more appropriate and effective and certainly efficient to have the content that requires frequent updates to be really not included in the directory but that the directory provides a pointer to where the most updated information is maintained and can be found and used as part of the entity itself that maintains that kind of information in the respective sites rather than, again, having to frequently update these separate provider directories.

Then for content that still requires some updates that would be part of the content of the directory that will require updates, so the responsibility of maintaining that update is pushed to the end user basically, to the entities that are listed there. So they will still have that responsibility, a very important responsibility, to

maintain the data that is included in the directory about them updated, but we want to avoid really having in the directory data that requires a lot of frequent updates.

The categories of information that we recommend to include are divided into these three groups. First of all, entity "demographics" identification information, basically information that would allow users of the directory to identify the entity uniquely, so the name, physical addresses, and other familiar names and a human level contact, those kinds of data elements would be the ones to include.

The second category would be information exchange services, so what are the kinds of information exchange services that are supported by the entity listed in the directory that would be relevant to the exchange and will allow the entity searching for them to execute the exchange. So think like relevant domains as defined by the entity, relevant locations of a Website where information is further available, protocols and standards that are supported by the entity listed for information exchanges with others, so things like the transport standards and protocols and data content and data format standards and protocols, and a few examples are listed there.

There's then the possibility that the entity directory can point to this information rather than having to physically maintain that information in this directory, since that might be something that could change frequently, particularly in the early stages of the directory. But that's a possibility one could determine whether it would be something that would change so frequently that it might be best to put a pointer and then have that data be maintained in the entity's own respective sites rather than incorporate that data into this. That of course on the back end could create some additional workflows that need to be defined, but that's a possibility. Addresses for different protocols, Web services, ..., I think those are part of the previous bullet probably too.

Then one idea was to include a general inbox location if the entity and the health information exchange is using such a concept. In some HIEs that is one of the expectations that participants in those HIEs will have a general inbox sort of at the front door of the connection to the HIE where messages can be dropped off or picked up. So that general inbox location would be one of the elements that would be important to include in this provider directory.

Then the third category is the security type of services and credentials that are part of the entity listed, so the basic information about where those security credentials are located, the type of security credentials and that kind of information, which will then be able to be used for functions like authentication and other security clearances.

So that's a series of recommendations on content, and let me stop here and see if there are any comments.

#### Paul Egerman - Software Entrepreneur

That was an excellent summary. Just one clarification, as I read this slide I saw the top part where it said basic content required should limit the need for frequent updates ... pointers. I saw all the things that you listed for information exchange services, and I assumed, ... the information exchange services would be the type of thing that you would typically put a pointer to where you would find this information, as opposed to putting it in the actual directory. ... these are the kinds of things that people would be changing.

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Yes, I think in the information exchange services that's what we noted there, that there are two possibilities, as I think you're pointing to. One is, include the data in the directory, like my organization supports CTD and CDA and HL7 version 2.5.1 and all these pieces of information, and have that information be part of the provider directory. The other possibility, as you point out, is the pointer where entities will be able to point to that. What you're saying is that you thought the second possibility was the actual recommendation to actually—

#### Paul Egerman - Software Entrepreneur

Yes, it should be encouraged, and maybe that's an issue that the Standards Committee should consider. But it just strikes me, and I think you gave a really good example, but so many changes from HL7 2.5.1 to 2.5.2 and you don't really want to change the directory. You'd like them to just update their own Website or something to make that happen, so you get less frequent updates is the intention.

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Yes, I think that's an important point. In fact, in some instances the supported messages might need to be more granular, like I support, for immunization registry exchanges, 2.5.1 instead of 2.3.1, for example, two of the possible standards under meaningful use. First of all, I think the Standards Committee might be one place where this could be farther defined. Part of the reason for saying that is that if the entity is maintaining that on their own site, then there's going to be a need to create standardized message exchanges between the entity that is providing the entity level provider directory and then finding that pointer and then going through that pointer. In many respects the expectation is that this all will be automated and not some person physically actually going to a Website and checking what data might be supported. So there will be a need to establish some standards for those kinds of queries and responses of the information exchange services, which would not be necessarily an issue. It's just additional workflows that need to be defined.

But the Standards Committee would be able to work on those and there's some of that already happening in the industry through efforts like the ones that ... interoperability or IHE, the international entity that defines some of these protocols and profiles for exchanges. So we could add to this point the fact that there are two possibilities. One is to have the actual information exchange be part of the directory, but that we might want to encourage organizations to include a pointer and there will be a possible frequent change of that information, including a pointer to where that information is.

#### Paul Egerman - Software Entrepreneur

That makes sense.

#### Walter Suarez – Institute HIPAA/HIT Education & Research – Pres. & CEO

Any other comments on this slide? Okay, well let's go to the next slide. The next slide talks about the business models, so here again throughout the discussions we had we always had this sort of a very critical element of how is this all going to really work in the industry and in the information exchange world. So we worked through several possibilities from more centralized to more decentralized and fully federated to hybrid options, and so here are some of the recommendations and guidelines that we came up with.

First, a few guidelines around this, basically the business model needs to support the ability to have this entity level provider directory be scalable at a national level. So national scalability is going to be a very critical element of the business model, and that really points to some of the drawbacks of some of the other models that are much more silo style models in which each of the HIs might do their own things and not be able to interoperate, as well as harmonization and interoperability across these localities and regions. So that's one of the expectations and guidelines that this business model has to be able to scale up to national infrastructure of interconnected health information exchanges.

The business model needs to provide also the flexibility to accommodate some of the different approaches in architecture infrastructure that the HIEs themselves are having. Some HIEs in some regions are using an X model, a more centralized model for their processing of the exchanges and some of the HIEs are using a very federated model, and some others are using a hybrid model, and so this provider directory approach needs to accommodate for all the various approaches that are used by HIEs in the respective areas.

Governance has to be defined within the context of the overall ONC governance efforts that the Governance Workgroup is working towards. So that's why you will see that we are not making a lot of specific recommendations around governance because we're certainly going to be relying upon the governance recommendations from that workgroup.

The maintenance responsibilities we mentioned have been pushed to the end user participant. There will be a need to establish registering guidelines for validating, adding, modifying, deleting, changing the information. So those guidelines will need to be established, and that's part of what this process will produce. Some of the guidelines, as we'll talk in the policy issues later on, will also relate to similar guidelines that would need to be described for the individual level provider directories. That's why there will be some cross linkages between guidelines related to the registration validation change of editing of individuals and entities in these directories.

With respect to security, there needs to be certainly coordination with the recommendation from the tiger team. For example, discussions are being held in the tiger team related to authentication, the processing and issuance of credentials and certificates by certificate authorities and how those certificate authorities would also be maintaining and able to maintain and certainly will need to maintain some of these provider directories. So that kind of role would need to be cross-referenced with the recommendations that we're making here. Then governance, I think we said it again I guess, we need to coordinate with the Governance Workgroup on this.

Any questions about this first set of guidelines related to the business model before we get to the description of the business model itself? Okay, let's go to the next slide and talk about the recommendations on the business model. What we are recommending is to basically use an Internet-like model, nationally coordinated with a federated approach, and here are some of the features that we're recommending and seeing will be part of this approach.

First, the process of registering entities, the expectation is that there will be a certified registrar or registrars actually, different entities responsible for registering the entities that will be eligible to be part of this entity level provider directory. These registrars will be registered and certified to be able to process those requests for registration in the provider directory. So the expectation is that there will be entities acknowledged as entities able to carry on those functions of receiving, processing, and accepting entities to be listed in these provider directories.

There will be some need for national guidelines, so the registrars will follow these national guidelines that will be developed basically. That's one of the needs and certainly recommendations is to, based on this, begin to look at defining these national guidelines for registrars for who to accept, how to validate an application and how to establish some of the addressing standards and supporting those addressing standards in the provider directory. There will be an expectation that there will be registrar reciprocity, meaning the entities registered by a particular registrar will be recognized across the system, so they would not need to register with each of the other organizations that are acting as registrars in other regions or in other areas where they will be doing business as well.

The entity level provider directories will be maintained by these registrars and they will be cross-referenced through the system similar to the DNS. Some of the roles of the federal government, and I know we'll be talking more about this, would be certainly the definition at a national level of standards and harmonizing some of the guidelines and the processes that the registrars will follow. Some federal agencies could themselves be registrars, and not just federal, maybe even at the state level, and there will be a benefit of building on existing federal government tools like PECOS, the provider enrollment system for Medicare, or NPPES, the National Provider Enumeration System, the MLR for entities registered in the Medicaid Meaningful Use program, and some other tools like that would certainly be tools and resources that could be used to start this process.

The benefits of this model basically are national scalability, that was one of the conditions that we thought would be very important being able to create this system that would be scalable at a national level. The other one is interoperability across regions and HIEs through this reciprocity of registrars and national standardization of content and of addressing and things like that. It could be relatively simpler to get going and start compared to some of the other models.

Some of the possible issues, data management will be one important one in terms of the maintenance of the data and what data gets to be part of the directory, and what data gets to be pushed out into the organizations and creating these pointers. Then the conformance move towards accepting this model across the industry, basically that could be one of the issues is to what extent and what kind of levers we can use, and certainly we'll talk more about levers a little later on. Let me stop there and see if there are any questions or comment additions to this.

#### Paul Egerman - Software Entrepreneur

Walter, I have a couple of comments. First of all, I really like what you wrote here in the analogy to registrars. I like the concept in general. One of the reasons why I like it is one suggestion that I'm making, which is probably a suggestion also for the Standards Committee to consider, would be that one way to implement this concept as a business model for the directory is actually for NHIN to choose a new top level domain, a domain extension like .NHIN or .NWHIN. If you do that then you automatically can use all the registration software that exists for Internet registrars, and so you might be aligned with ..., so that's just one suggestion.

But I also have a comment as I read this slide, and the concern I have is when I look at some of these things where it says "registrar reciprocity" and even the reference to ..., that's not quite the way I envisioned this working. I envisioned you could have multiple registrars, but the registrars would basically publish their information into a national file or a national database of all entities. The way this reads it's almost like each registrar keeps locally somehow a copy of all the data. But I would picture that each registrar would publish the information into a single national directory file.

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Yes, I think in my mind that was the intent. If it's not clear then certainly we can add that to the description of the concept of reciprocity. I think there are two concepts under reciprocity. One is that you would not, if you're registered in one you don't need to register in all the other ones you might be doing business with. But this other concept that you're bringing up, which is that each registrar will be publishing their listing and disseminating that listing into a national registration database I guess that will be the way to cross-reference registrant data from the different registrars. So I think we can highlight those two items in this line about the registrar reciprocity and publication maybe or something like that.

#### Paul Egerman - Software Entrepreneur

Yes, maybe it's just me, but I think that that would be helpful. In other words, the end result is there's one national directory as opposed to 50 or 60 or 70 depending on how many registrars we have, directories. There's one directory. This is just multiple ways to get into the directory.

#### Claudia Williams - ONC - Acting Director, Office State & Community Programs

Paul, I think that's a very excellent point. I'm not certain we've set a conclusion and debated it. So I'd be a little reluctant to put it in the recommendations, and maybe others can weigh in, maybe I missed it, but I think there are multiple architectural approaches you could take to come up with a way to cross-reference the directories and I would just want us to deliberately put forward that. I'm not sure we've discussed that fully.

#### Gayle Harrell – Florida – Former State Legislator

I'd like to also comment on that. I think that we have not come to that conclusion or perhaps there's an underlying agreement on it, but I don't believe we had verbalized that. Secondly, who will have access? If you're part of a registry in, say, Florida, do you automatically have then access to view all the entries

from all other states in the national directory? Are there going to be fees for this, because you have a ... business model to make it work? What gives you that ability to access the national directory?

# Paul Egerman - Software Entrepreneur

I think, Gayle, you ask some good questions. To get back to Claudia's comment, I believe we haven't addressed that issue, so my question is can we address it right now to include it as part of our recommendation?

# Claudia Williams - ONC - Acting Director, Office State & Community Programs

I don't want to rely too much on process, but I think we should probably address that in a taskforce and then make that a part of the next set of recommendations. Others, please weigh in, Micky, others.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Paul, I just have a clarifying question. Is what you're proposing a question about architecture or it's really— I understand it not really to be necessarily about architecture but about having a single central directory however it's architected. Meaning that from a user experience perspective that there's one query that they do regardless of what their setting is and they're able to experience it as one single nationwide entity level directory.

#### Paul Egerman – Software Entrepreneur

Yes, I'm not trying to do the architecture. I am trying to do the basic policy concept that you would have multiple registrars but you would have one national directory. The argument for one national directory is if you have a state like New York or California where there's good reason to have multiple registrars because of the size of the state, but at the same time there would be good reasons also to have a directory with everything in the state. But you have other states like New Hampshire, Vermont, Rhode Island, Massachusetts, or state boundaries, boundaries can go ... and in Missouri where there's just a lot of activity that goes around folks get involved with multiple states even without the very dramatic discussion about the emergency departments. It's just a natural need to cross state boundaries. So that would be the justification for doing it.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Claudia, I think you're right—Walter and others on the taskforce please weigh in if I'm not reading our discussion right—that we didn't formally have the discrete yes, no conversation about this national directory concept. On the other hand, it's certainly been implied by some of the use cases that we've discussed but would love others to—

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

I think that is true. I think the question is, in my mind, whether the national registry database is a physical, centralized and centrally maintained type of database, or does it work more like the DNS, which is a virtual directory of addresses that everybody publishes on and so the data is there, it's centralized, but whether there's a physical place where the actual database is sitting or whether it's a virtual, if you will, database interconnecting or supporting all the published directories by each of the registrars, that's probably maybe my question. I'm not sure when we say specifically a national central registration database many people will be reacting to it as, oh, here we go, another database centrally managed and maintained by the federal government, something like that, that might give the wrong sense. So there's that question about the architecture and whether this is truly intended to be a central, single place, location registration database, so whether it's again more like a DNS is my question.

#### Paul Egerman - Software Entrepreneur

Walter, my comment was not intended to answer that architectural question, although in your slide 10 you do have this reference to DNS which I think was a good reference, which is what caused me to raise the question, because DNS really doesn't cross-reference things. It's like a single file in effect that you can get if you want to get it from multiple sources. My intention, though, was not to imply that there's anything

maintained by the government or any centralized database specifically ... published into a national data structure or a national data directory.

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Which, again, I think is my understanding, my expectation. That's pretty much one of the few ways that this could scale up to be able to done nationally.

#### Carl Dvorak - Epic Systems - EVP

I think we've not asked the question formally and we probably should take it upon ourselves to ask it. Interoperability really has a tremendous use case for national interoperability, especially given some of the state line configurations. I think it's critically important that we do tackle that, because if we can ... to a national directory I think we could bring down tremendous barriers to interoperability that existed in many parts of our country.

#### <u>Claudia Williams - ONC - Acting Director, Office State & Community Programs</u>

I wonder if for the purposes of Thursday I think there's strong agreement that we want users to be able to have a place to go to link to all the entities and that we're assuming that a DNS-like structure might be the best way to get there, where you have distributor responsibilities for maintaining and multiple registrars, but there's a way to get the whole Kahuna. I think we're all in agreement about the assumptions and that we're not suggesting that there be a centralized database maintained by Medicare, for instance.

#### Paul Egerman - Software Entrepreneur

That's correct. I agree with your comment, Claudia, about the whole Kahuna, as you called it. However, you said Thursday and I think the meeting's on Friday.

# <u>Claudia Williams – ONC – Acting Director, Office State & Community Programs</u>

Oh, sorry. Okay. Thank you.

#### Paul Egerman - Software Entrepreneur

I just want to make sure that I show up on the right day.

#### <u>Claudia Williams – ONC – Acting Director, Office State & Community Programs</u>

... to show up on the wrong day, right. Thank you.

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

I think that my sense of the conclusion, or at least the consensus perhaps of where we are is that the expectation will be that the registrars will publish their data into a national registration system, let's call it that way, and that through that system similar to the DNS entities will be able to cross-reference locations of other entities that are outside of their respective registrar domains, let's say. So that—

#### M

This is .... I would pretty much agree with what everybody's saying. I think the key issue is it really is an enormous benefit to have a single interface, and I agree with Paul, we're not saying to have to look up DNS or a particular architecture, we're just saying, I think everybody's saying the same thing, which is we can have many people responsible for various parts of the maintenance and entering of the data ..., but when you want to use provider directories there has to be uniformity at a national level and all the data has to be available.

#### Connie Delaney - University of Minnesota School of Nursing - Dean

I, too, agree with the necessity of the national registry being coordinated at the national level. I also agree with the comment that we're not talking about the architectural issue here related to the data.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Connie, thank you for that. That's what I was going to try to bring up now, or at least emphasize that what we're saying is that we want a national approach to a directory and we are essentially remaining neutral on the question of the architecture. Is that a fair assessment?

#### Connie Delaney - University of Minnesota School of Nursing - Dean

That's what I concur with.

#### <u>Claudia Williams - ONC - Acting Director, Office State & Community Programs</u>

Micky, I would agree, with maybe one caveat, which is the strong principle that responsibility for data maintenance should be distributed. So I think that speaks, again, to a big database that Medicare maintains exclusively.

#### Carl Dvorak - Epic Systems - EVP

Not necessarily, Claudia. I think distributing the registrar function would not necessarily preclude having that data assembled in one place so that you could access it in a uniform manner. I think the way that ... is there are a couple of level domains that fundamentally they get pulled in together for domain zone, like a dot-com or a dot-net or a dot-gov, and the reliability of having one place to check will likely become an important factor in national responsibility.

#### Paul Egerman - Software Entrepreneur

I agree with what you just said, Carl, although what I'd say to you both, Carl and Claudia, is I don't think we need to discuss the architecture at this point. I think all we need to do is say, here's our policy framework and guidelines and get consensus from the Policy Committee on that, and that would be a huge step forward.

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Let me suggest the following. I'm just actually typing the content. So in the slide that you're looking at where it says "registrar reciprocity" what I was going to do was call that "Registrar Reciprocity and Publication into a National Registration System" and then there would be two bullets under that, one, that would be the current one, the entities registered by one registrar or recognized across the system, and in parentheses there's, just to emphasize, "(no need to register again at different registrars)." Then a second bullet under that, a sub-bullet under that, basically under the item underlined that would say, "Each registrar publishes directory information into a national provider directory registration system that, like DNS, will support identification of entities across registrar domains."

#### Paul Egerman – Software Entrepreneur

Let me make a suggestion to you, Walter, which is if everybody's in agreement on the basic concept, rather than try to wordsmith this slide right here, you and your colleagues put together some slides ... and if people have any suggestions they could make them ....

# <u>Micky Tripathi – Massachusetts eHealth Collaborative – President & CEO</u> I think that's a great idea.

# <u>Walter Suarez – Institute HIPAA/HIT Education & Research – Pres. & CEO</u> Sure.

#### Paul Egerman - Software Entrepreneur

The basic concept that we have, though, is that the registrars really are involved with a decentralized approach to dealing with the entering of the data and the maintenance of that data. Whereas, there will be a sub-national data structure concept which might be similar to DNS that is available to users.

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Okay, we'll do that then. We'll basically edit this slide and send the slide for people to review. Any other comments or reactions to the business model? All right, I think I'm going to turn this back to Micky for the discussion on the policy levers. Micky, back to you.

# Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Wow. Thanks, Walter. Everything that Walter just presented here we'll refine it and try to structure it for the 19<sup>th</sup> so that it's sort of a crisp set of recommendations. I think it pretty much reads that way subject to comments that we've had on the call here and that we'll get over the next couple of days from all of you, but I just want to pause here again and just get the workgroup consensus or a pulse check of the consensus that we are in agreement with this set of recommendations, again, subject to the changes that we've just discussed that we will formalize in a new document that we send out over the next couple of days. Is everyone okay with that? Is there anyone who is not okay with that? Okay, great. Walter, thank you very much.

#### <u>Walter Suarez – Institute HIPAA/HIT Education & Research – Pres. & CEO</u> Okay.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

I'm just looking at my watch here and we've got about 15 to 20 minutes to just tee up the next part of the conversation, we need to leave a little bit of time for the public comment period at the end, so if we could advance the slide, please. So as Walter suggested, one of the things that we want to do now is think a little bit about the levers. So having come to an agreement at a policy level on what the different dimensions of entity level provider directory might be and what a high level picture of what a business model or structure might look like, there's still this question of what policy levers might we recommend as a workgroup to the Policy Committee for the Policy Committee's consideration with respect to levers that the government could pull to help facilitate the type of entity level provider directory that we're recommending here.

So let me, first off, thank Claudia for putting together the next couple of slides, which is really just reflective of a bunch of e-mails going back and forth, so I don't want to pin it all on her, but I certainly want to give her credit for synthesizing of stuff that was flying around in e-mails and representing it in a form that I think will be a very helpful way for us to think about these issues. Again, the idea here isn't that we need to come to conclusion I think on any of these, it's more to ask the question of the workgroup about are these the right set of questions that we ought to be engaging in for our next round of conversation as we start to think about putting a terminus on the entity level provider directory conversation and then start to have individual level provider directory conversation after this Friday's Policy Committee meeting.

So again, just to kick off that conversation, the policy questions that we're thinking about are about which business models should the government promote at a high level? What are the potential government roles and levers here? There's certainly a whole variety of roles and levers that one can think about, not just within ONC but in various agencies outside of ONC. But certainly even within ONC there are a few levers. What do we think are critical and necessary to meet our goals and certainly invoking the principle of minimal necessary, I think is probably one thing that is certainly worthy of discussion. I don't know if anyone disagrees. But it certainly seems like a worthwhile place to start.

Then finally, how do we think about the overlap between this part of the conversation related to entity level provider directories and the individual level provider directories. Do we need to dive down deeper into the individual level provider directories conversation before we can make recommendations about policy levers? Or can we have that conversation first, come up with a set of recommendations on policy levers, and then move to the individual level?

Let me first pause here and ask Claudia if there's any other framing or introductory remarks to offer.

#### Claudia Williams - ONC - Acting Director, Office State & Community Programs

No. I remember when, Micky, you first presented the overview slides of all of the issues we were going to work through and I remember thinking, oh my gosh, we're never going to get there. What's exciting I think is we really have a strong vision and view of what a path could look like and I think a lot of them bump up against questions that we've actually been talking about this morning, about how to create the right motivations and what the right structures are, and how to use a bunch of possibly nudges in different directions to get us to the right results.

So I think you'll see on the next slide that what we're really talking about is how you could cause this to be and what some of the levers might be, understanding that like any policy recommendation made by these groups we would then at the ONC level take it into consideration and think about, frankly, first of all, the need for a second ... strategy, etc. But I think having this group get down into the details of how you can align the different pieces of the levers would be extremely helpful and you can see very quickly that it nudges up against the Privacy and Security Tiger Team, the governance work. So I think one of the things we want to do is come up with conclusions about what we think the recommendations are, but secondly really clearly define dependencies with some of those other activities going on. That's it for me. Should we look at the next slide?

# Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Yes, please. Do you mind walking us through, or would you like me to?

#### Claudia Williams - ONC - Acting Director, Office State & Community Programs

Sure. Again, really all we wanted to do today was to introduce this topic and talk through a framework we might use to think about what needs to happen from an infrastructure standpoint, what needs to happen for the actual populations of data, what needs to happen from an interoperability standpoint, and what needs to happen from a governance standpoint. Obviously, those things all need to work together, but I think it's helpful to keep them distinct because we may not necessarily have one big policy adoption that covers all of them. But we need to think about, for instance, the piece of it that has to do with meaningful use might speak to the interoperability of an EHR with this national view of an entity level directory.

So let me just pause here and maybe let folks think about and react to the structure. We'll be taking up these questions in more detail in the taskforce discussions that will happen after the Policy Committee, so we're not bringing forward any particular recommendations, but we want this group to have a chance to give input about this direction we're moving and any suggestions about things that we should be covering as we discuss this.

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Just two suggestions for additional areas for roles and levers, one is standards, which I know is part of interoperability, so maybe it's just renaming that as standards and interoperability. Because I think the expectation is that the standards will be driven from a national or federal government level, so maybe it's just renaming that to standards and interoperability. The other one is participation. If there's an area where there could be potential significant levers to start up and to move this process forward, establishment and the use of this is on participation. Participation, both in terms of the participation by HIEs and others that may or could become registrars, as well as participation of the entities that would be listed and be part of the provider directory.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Just so I understand your point, do you think that's covered by the statement requirements for participants in NHIN, which is the third column over? Or is there a different point that you think that's not capturing?

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

I don't think that covers it. I think that governance covers more, it's my understanding that it would cover more how the provider directories are covered not so much what are the levers to entice participation in the provider directories.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

I see. So what are the rules of the road for those who are going to be participants in this, and somewhat the point that Gayle was touching upon earlier, about access and things like that, what the data can be used for.

#### W

One thing to note here, which is I think interesting and important, obviously when it comes to folks that are getting meaningful use incentives, hospitals and eligible providers, there's a great ability to motivate participation in things like this by making it part of meaningful use. There's a lot of entities, and I might argue even the vast majority of the public health entities, labs, imaging facilities, that aren't under the umbrella of meaningful use incentives and in fact may not even be participants in nationwide health information exchange, either direct or exchange kinds of on boarding. So one question becomes what the levers are to get those folks to maintain their information in the directory or in the distributed manner we talked about. That is something we'd probably want to turn to with some focus when we discuss this in the taskforce.

#### Paul Egerman - Software Entrepreneur

I think the other point that was raised is we're not only talking about participation at the entity level, but also inducing organizations to become registrars and other higher level entities.

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Yes. So maybe to not create more columns or granularity there, I think if you rename the third column or the fourth column, depending, "Interoperability," rename it "Standards and Interoperability" because that really is pushing for standards, and then the last column, "Governance and Participation," and then have additional bullets or items under governance and under that column that points to levers to entice entities to participate in the provider directory, entice potential registrars to become registrars, and entice the maintenance of the data. I think those three elements are, in my mind, very critical as potential levers that the government can use, or areas in which levers can be used to get provider directories to move forward.

## Claudia Williams - ONC - Acting Director, Office State & Community Programs

I'm wondering, because the second column really addresses the third point you raised, which is the data quality. And it may be possible we can play with it to have that be about participation, both from the three elements you talked about, participating as an entity, as a registrar, and maintaining data quality. So we can play with some different options.

#### <u>Walter Suarez – Institute HIPAA/HIT Education & Research – Pres. & CEO</u> Okay.

#### Paul Egerman - Software Entrepreneur

I think this is a good way to lay out the options, and I appreciate this. It clarifies a lot of things. I just had one, maybe it's sort of a different question, under infrastructure it says some federal agencies are registrars. I didn't understand why it said that. Maybe it should say some federal agencies might be registrars. Why does it say some are registrars?

# Claudia Williams - ONC - Acting Director, Office State & Community Programs

That's fine. It was quickly thrown together yesterday and so I was just trying to reflect what we had in our recommendations.

# Paul Egerman – Software Entrepreneur

Yes, so it's really an issue that some federal agencies could become registrars and states or HIE or HIO programs might also be registrars. I think at this stage we just want to be very fluid about who may or may not be. I don't think, for example, DEA ... would be a registrar, but I don't know that for sure.

#### M

Whereas the CDC might, or state public health.

#### Paul Egerman - Software Entrepreneur

Yes, state public health might, but I just want to say agencies might be, HIE organizations might be, and maybe vendors could even be registrars. There are a lot of possibilities.

#### Claudia Williams - ONC - Acting Director, Office State & Community Programs

I think we were just trying to paint a picture of what this would look like so we can take—

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Yes. It sounds like there's sufficient interest to have the taskforce ... down deeper into this, just from what I'm hearing in terms of level of engagement of people wanting to talk about it. I think, Walter, it seems like we can do that in terms of the next level of activity for the directory taskforce. Does that make sense to you?

# Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Yes, absolutely.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Great. So now it's just a question for the workgroup, do people feel that it would be useful to present some version of this at the Policy Committee meeting just to ... where we're headed next and to give a flavor of the kinds of levers that we're talking about. Are people indifferent, do they think that would be a good thing, do they think that would be a bad thing?

#### <u>David Lansky – Pacific Business Group on Health – President & CEO</u>

I think we should at least hint at this so people understand the issues that are surfacing.

#### Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

I think it's going to be valuable, particularly in the context of drawing the line between where our taskforce and the recommendations of the taskforce end and where then they can be picked up by the Standards Committee. I think it's going to be very important to maintain that distinction and avoid having some of the recommendations trailing in to specifics that might be more appropriate for the Standards Committee to address. I think that kind of guidance from the full Policy Committee will be very helpful.

#### Paul Egerman – Software Entrepreneur

My response is I'm fine with you presenting it, as long as you don't run over on your time. The only reason I care is that Deven and I have to present after you. So as long as you keep it in your time schedule, that's fine. As long as you don't take up my time I'm happy with it.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

I always want to get off the stage, so ....

# Claudia Williams - ONC - Acting Director, Office State & Community Programs

Micky, we can work on just some edits to reflect the conversation ....

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Okay, that sounds great. I was just going to talk about the process for the next couple of days for a second and then thought we could close off the call with the public comments, if that's okay with everyone. In terms of process let me just throw out a possibility, which is to say that we'll do the cleanup of the slides for the actual presentation and then maybe is it fair, and Walter and Claudia you tell me as well, is it fair for us to say that by tomorrow at noon, so Tuesday at noon we'll distribute that to the workgroup members, and then maybe ask for comments back by Wednesday night? That will allow us Thursday to process any changes and then get that to Judy in time—

#### <u>Judy Sparrow – Office of the National Coordinator – Executive Director</u>

Yes, if you could get it to me no later than noon on Thursday, though, because I need to distribute it. There's a lot here that the Policy Committee members should have time to review.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Right, okay. So if we can get the comments by Wednesday night, we ought to be able to turn that around and get that to you by Thursday at noon. Does that work for everyone?

#### <u>Claudia Williams – ONC – Acting Director, Office State & Community Programs</u> Yes.

# Walter Suarez - Institute HIPAA/HIT Education & Research - Pres. & CEO

Yes, that works for me.

## Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Well, this has been a terrific discussion. I want to again especially thank Walter and Claudia for putting together a number of the slides and all of the taskforce members who participated in developing what I think is a great set of recommendations to push this discussion forward. Judy, I'll turn it over to you for the public comments.

#### Judy Sparrow – Office of the National Coordinator – Executive Director

Operator, could you please invite anybody from the public who wishes to make a comment please.

#### Operator

We do not have any comments at this time.

#### Judy Sparrow – Office of the National Coordinator – Executive Director

Thank you, operator. Thank you, Micky.

#### Micky Tripathi - Massachusetts eHealth Collaborative - President & CEO

Great. Thank you. Thank you, everyone.

# **Public Comment Received During the Meeting**

- 1. Since many providers currently charge fees to copy or send records, couldn't each contributing entity charge a small automated transaction fee that would be significantly less than current fees, but that over time and volume could easily pay for the development and maintenance of their available data.
- 2. Would an ACO be seen as a provider or a business associate/clearing houses?